

## Estimation of wind sea and swell using shipboard measurements – A refined parametric modelling approach - DTU Orbit (08/11/2017)

### Estimation of wind sea and swell using shipboard measurements – A refined parametric modelling approach

Shipboard wave estimation has been of interest in recent years for the purpose of decision support. In this paper, estimation of sea state is studied using ship responses and a parametric description of directional wave spectra. A set of parameters, characterising a given wave spectrum is estimated through an optimisation problem using global search basin with proper constraints. The cost function is established based on the difference between the energies of a set of measured ship responses and the corresponding theoretical spectral moments. A partitioning procedure is applied, which is able to separate swell components from wind seas.

#### General information

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